

ZyXEL ES-3124F V3.80(AIV.3)C0

Release Note/Manual Supplement

Date: June 17, 2011

This document describes the features in the ES-3124F product for its 3.80(AIV.3)C0 release.

Support Platforms:

ZyXEL ES-3124F V3.80(AIV.3)C0 supports models: ZyXEL ES-3124F

Version:

ZyNOS Version: V3.80(AIV.3) | 6/17/2011 15:18:33

BootBase Version: V1.0 | 07/06/2007 16:26:46

Enhanced Features

1. 802.1s MSTP
2. SNMPv3
3. enlarge syslog buffer
4. 802.3ah OAM
5. Multilevel CLI
6. SNMP trap group
7. configurable multicast VLAN
8. independent IGMP snooping and MVR setting
9. enlarge concurrent telnet session
10. IP source guard(Static binding, DHCP snooping, ARP inspection)
11. Two rate three color marking
12. IP subnet VLAN
13. RADIUS MAC login
14. RADIUS accounting
15. TACACS+ authentication
16. TACACS+ accounting
17. IGMPv3 snooping
18. Loop guard
19. Daylight saving
20. Bootbase changes to v1.0 for manufacturer only
21. There is no effect upon present products of changed Bootbase

Default Bootbase Setting:

ZyNOS Version	V3.80(AIV.3) 6/17/2011 15:18:33
Bootbase Version	V1.0 07/06/2007 16:26:46
Vendor Name	ZyXEL Communications Corp.
Product Model	ES-3124F
ZyNOS Code Model	ES-3000
HTP Code Model	Unknown
ZyNOS ROM address	50080000
System Type	10
First MAC Address	0019CB000001
Last MAC Address	0019CB000002

MAC Address Quantity	02
Default Country Code	FF
Boot Module Debug Flag	01
RomFile Version	8A
RomFile Checksum	a506
ZyNOS Checksum	a3a7
SNMP MIB level & OID	060102030405060708091011121314151617181920
Main Feature Bits	C0
Other Feature Bits	
01 13 00 00 00 00 00 00-00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00-00 41 13 00 00 00	

Features:

1. MAC address learning
2. Support IEEE 802.1D transparent bridge
3. Support IEEE 802.1Q tagged VLAN
4. Support Port-based VLAN
5. Support IEEE 802.1X
6. Support IEEE 802.1W
7. Support IEEE 802.3AD
8. Support GVRP
9. IGMP snooping
10. Support IEEE 802.1p
11. Automatic age out
12. Specific MAC addresses forwarding per port
13. MAC Filtering
14. Port Trunking
15. Port Mirroring
16. Bandwidth Control
17. Broadcast Storm Control
18. Support Strict Priority and WRR queuing method
19. Static IP management or dynamic IP(DHCP client)
20. Multiple IP address management
21. Firmware upgrade and configuration backup/restore.
22. Remote manageable.
23. Cluster Management
24. WEB manageable
25. Support RFC-1213 MIB II
26. Support RFC-1493 Bridge MIB
27. Support RFC-1643 Ethernet MIB
28. Support RFC-1757 Four group of RMON
29. Support RFC-2674 VLAN MIB
30. NEW CLI supported
31. System configuration backup / restore in text-mode
32. Multiple login supported
33. Radius management authentication
34. SSH/SSL support
35. Syslog
36. Protocol based VLAN support
37. DiffServ feature (DSCP – 802.1p priority mapping)
38. MRSTP
39. RADIUS enhancement(for 802.1X enhancement and multiple radius servers)
40. Administration user management
41. IGMP enhancement
42. Web enhancement (Select all, Clone)
43. Reserve multicast group support
44. Support high speed fan module. (Up to 7000 RPM).

Bug Fix:

1. [MAC]After change the DUT's MAC address with specific number "c86c87123456" and reboot with default ROM, some abnormal message will be shown in console.

Known Issues:

1. Management port test fail in 100M long cable.
2. Management port has compatible issue with Cnet Pro 2000 network interface card.
3. The packets which destination address is marked in the filter setting will always send to port 1.
4. Symbol and dribble error packets will count into FCS error counter.
5. Filtering: In some special cases, setting one MAC with discard-source will cause device filter all packets with this MAC, ether source MAC or destination MAC.
6. Do not suggest cooperate LACP with RSTP more than ten ports.
7. Do not support tagged frame forwarding in the Port-Based VLAN.
8. If the contact between RJ45 and wire cable or the wire cable is unstable, the cable diagnostics maybe fail.
9. The system-wide rule entries are shared with CIR rate control and policy rules. So you may fail to load max policy rules while enabling CIR rate control on all ports.
10. Ports configured to run RSTP will not synchronize with peers if the port is in BLOCK mode.
11. Packets' MAC with tagged vlan id which is not configured in device will be learned.
12. Port configured in fixed-speed mode (AN is disable) for change may not link up. It could be linked up with operation SOP (link down then link up manually)

Limitation of Settings:

1. VLAN 1Q static entry 1024
2. Static MAC forwarding entry 256
3. MAC filtering entry 256
4. Cluster member 24
5. Management IP address 64
6. Protocol based VLAN entries per port 7
7. The number of dhcp snooping can learn is 4094.
8. The subnet based vlan can support up to 48 rules.

Firmware Upgrade:

The ES-3124F uses FTP to upgrade firmware in run-time through its built-in FTP server. You can use any FTP client (for example, [ftp.exe](#) in Windows) to upgrade ES-3124F. The upgrade procedure is as follows:

Upgrade ES-3124F FW:

```
C:\> ftp <ES-3124F IP address>
User : admin
Password: 1234
230 Logged in
ftp> put 380AIV3C0.bin ras
ftp> bye
```

Where

- User name : the management user name, admin by default
- Password : the management password, 1234 by default
- 380AIV3C0.bin : the name of firmware file you want to upgrade
- ras : the internal firmware name in ES-3124F

Configuration Upgrade:

The ES-3124F uses FTP to upgrade configuration in run-time through its built-in FTP server. You can use any FTP client (for example, [ftp.exe](#) in Windows) to upgrade ES-3124F. The upgrade procedure is as follows:

Upgrade ES-3124F configuration:

```
C:\> ftp <ES-3124F IP address>
User : admin
Password: 1234
230 Logged in
ftp> put 380AIV3C0.rom rom-0
ftp> bye
```

Where

- User name : the management user name, admin by default
- Password : the management password, 1234 by default
- 380AIV3C0.rom : the name of configuration file you want to upgrade
- rom-0 : the internal configuration name in ES-3124F

ZyXEL ES-3124F V3.80(AIV.2)C0

Release Note/Manual Supplement

Date: May 10, 2010

This document describes the features in the ES-3124F product for its 3.80(AIV.2)C0 release.

Support Platforms:

ZyXEL ES-3124F V3.80(AIV.2)C0 supports models: ZyXEL ES-3124F

Version:

ZyNOS Version: V3.80(AIV.2) | 6/22/2010 11:52:30

BootBase Version: V1.0 | 07/06/2007 16:26:46

Enhanced Features

1. 802.1s MSTP
2. SNMPv3
3. enlarge syslog buffer
4. 802.3ah OAM
5. Multilevel CLI
6. SNMP trap group
7. configurable multicast VLAN
8. independent IGMP snooping and MVR setting
9. enlarge concurrent telnet session
10. IP source guard(Static binding, DHCP snooping, ARP inspection)
11. Two rate three color marking
12. IP subnet VLAN
13. RADIUS MAC login
14. RADIUS accounting
15. TACACS+ authentication
16. TACACS+ accounting
17. IGMPv3 snooping
18. Loop guard
19. Daylight saving
20. Bootbase changes to v1.0 for manufacturer only
21. There is no effect upon present products of changed Bootbase

Default Bootbase Setting:

ZyNOS Version	V3.80(AIV.2) 6/22/2010 11:52:30
Bootbase Version	V1.0 07/06/2007 16:26:46
Vendor Name	ZyXEL Communications Corp.
Product Model	ES-3124F
ZyNOS Code Model	ES-3000
HTP Code Model	Unknown
ZyNOS ROM address	50080000
System Type	10
First MAC Address	0019CB000001
Last MAC Address	0019CB000002
MAC Address Quantity	02

Default Country Code	FF
Boot Module Debug Flag	01
RomFile Version	8A
RomFile Checksum	a506
ZyNOS Checksum	fd97
SNMP MIB level & OID	060102030405060708091011121314151617181920
Main Feature Bits	C0
Other Feature Bits	
	01 13 00 00 00 00 00 00-00 00 00 00 00 00 00 00 00 00 00 00 00 00 00-00 41 13 00 00 00

Features:

1. MAC address learning
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3. Support IEEE 802.1Q tagged VLAN
4. Support Port-based VLAN
5. Support IEEE 802.1X
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12. Specific MAC addresses forwarding per port
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40. Administration user management
41. IGMP enhancement
42. Web enhancement (Select all, Clone)
43. Reserve multicast group support
44. Support high speed fan module. (Up to 7000 RPM).

Bug Fix:

1. Fix memory leak issue that the console will show “cli_proc: cli_init out of memory”.
2. Fix MVR broken configuration that after running MVR for a period, the IGMP-Querier-Mode will turn to <NULL>.
3. Fix that static MAC forwarding may be cleared from mac-address table while ARP inspection enabled.
4. Fix that ARP inspection will block all traffic if too many ARP packets come into trust ports.
5. Fix that cable-diagnostics for FE port isn't stable.
6. Fix looping in fiber port when restore configuration.
7. Fix that port with bandwidth control enabled conflicts with trunking if bandwidth control is global active.
8. Fix arp inspection issue for Vista gratuitous ARP.
9. Fix that web access fail for IE7+Silverlight.
10. Fix that when we try to get MAC-table from specific VLAN via snmpwalk, the result is wrong.
11. Fix that while setting up port-security and bcp-transparency at the same time, BPDU would flood out from the port configured bpdu discard.
12. Fix that the related ARP entry will be cleared after mac-flush.
13. Fix a TACACS+ issue on DUT. Use DUT and ClearBox TACACS+ Server 3.1.6 for using accounting type Commands, but the server don't display info about command completed.
14. Fix login will fail by adding cisco avpair that we don't support.
15. Fix when use ftp login, DUT may cause crash somewhere.
16. Fix DHCP renew packet cannot be forwarded to trunk port when enabling DHCP snooping.
17. Fix our switch will keep printing “...” infinitely, when use TFTP server backup running configuration.
18. Fix all management will lose after unsuccessful login via SecureCRT SSH2 if the operator changes login account.
19. Fix connect with DUT in SSH protocol without correct name or password, and that will cause memory leak.
20. Fix VLAN-Static VLAN Web GUI bug (because of more than 256 VLAN setting).
21. Fix static MAC forwarding entries cannot be deleted as anticipation.
22. Fix when the DHCP snooping and DHCP relay are enabled in the same time, DHCP relay will relay dhcp request to server that coming from DHCP snooping vlan.
23. Fix vlan1q port-isolation can only be set while vlan-type is 802.1q.
24. Avoiding looping by ignore the dhcp snooping pkt when the port is STP block port.
25. Fix when arp inspection is turn on and there are ARPs with CPU mac, do not add it into black list.
26. Fix multicast group entry is getting less and less, when l2 table hash has collision or l2 table full.
27. Fix enable lacp and no trunk member, vlan will disappear (after reboot or restore configuration).
28. Fix that port security can not work correctly after mac-flush.
29. Fix that DUT will crash on web-interface while delete un-existed policy entry by CLI.
30. Fix system may crash when receiving a crafted IP packet with a null length of data portion.
31. Fix that DUT may hang while doing oam loopback test.
32. Keep hw monitor fan when low temperature (<10°C).
33. Fix the MSTP can not work when our devices cooperate with HUAWEI device.
34. Fix the authentication will fail when first authentication by tacacs then radius.
35. Fix static route rule can be created with the destination IP address '255.255.255.0' in web, but CLI can't.
36. Fix enabled port intrusion, and do port test can cause port link down.
37. Fix the Port link down but port state of spanning-tree still forwarding or the root bridge have blocking port (port link up) when topology change over night.
38. Fix when using SilverCreek to test the multicastPortGmpFilteringProfile (OID: 1.3.6.1.4.1.890.1.5.8.47.26.1.1.4) with incorrect indices, DUT will crash.
39. Fix when user key in “[,” in CLI, the system will be hung.

40. Fix when enable remote management, but not enable any service (telnet, http...), after reboot DUT, DUT will pop error message.
41. Fix the DHCP option82 will be cascaded if enable DHCP snooping and option82 on the DUTs that cascaded. Option82 will only be added while DHCP packets come from untrust ports.

Known Issues:

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2. Management port has compatible issue with Cnet Pro 2000 network interface card.
3. The packets which destination address is marked in the filter setting will always send to port 1.
4. Symbol and dribble error packets will count into FCS error counter.
5. Filtering: In some special cases, setting one MAC with discard-source will cause device filter all packets with this MAC, ether source MAC or destination MAC.
6. Do not suggest cooperate LACP with RSTP more than ten ports.
7. Do not support tagged frame forwarding in the Port-Based VLAN.
8. If the contact between RJ45 and wire cable or the wire cable is unstable, the cable diagnostics maybe fail.
9. The system-wide rule entries are shared with CIR rate control and policy rules. So you may fail to load max policy rules while enabling CIR rate control on all ports.
10. Ports configured to run RSTP will not synchronize with peers if the port is in BLOCK mode.
11. Packets' MAC with tagged vlan id which is not configured in device will be learned.
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Upgrade ES-3124F FW:

```
C:\> ftp <ES-3124F IP address>
User : admin
Password: 1234
230 Logged in
ftp> put 380AIV2C0.bin ras
ftp> bye
```

Where

- User name : the management user name, admin by default

- Password : the management password, 1234 by default
- 380AIV2C0.bin : the name of firmware file you want to upgrade
- ras : the internal firmware name in ES-3124F

Configuration Upgrade:

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- 380AIV2C0.rom : the name of configuration file you want to upgrade
- rom-0 : the internal configuration name in ES-3124F

ZyXEL ES-3124F V3.80(AIV.1)C0

Release Note/Manual Supplement

Date: May 15, 2008

This document describes the features in the ES-3124F product for its 3.80(AIV.1)C0 release.

Support Platforms:

ZyXEL ES-3124F V3.80(AIV.1)C0 supports models: ZyXEL ES-3124F

Version:

ZyNOS Version: V3.80(AIV.1) | 5/15/2008 13:40:1

BootBase Version: V1.0 | 07/06/2007 16:26:46

Enhanced Features

1. 802.1s MSTP
2. SNMPv3
3. enlarge syslog buffer
4. 802.3ah OAM
5. Multilevel CLI
6. SNMP trap group
7. configurable multicast VLAN
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Bootbase Version	V1.0 07/06/2007 16:26:46
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Product Model	ES-3124F
ZyNOS Code Model	ES-3000
HTP Code Model	Unknown
ZyNOS ROM address	50080000
System Type	10
MAC Address	0019CB000001
Default Country Code	FF
Boot Module Debug Flag	01

RomFile Version	8A
RomFile Checksum	a506
ZyNOS Checksum	ddd4
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40. Administration user management
41. IGMP enhancement
42. Web enhancement (Select all, Clone)
43. Reserve multicast group support
44. Support high speed fan module. (Up to 7000 RPM).

Bug Fix:

1. Fix the bug that too many topology changes in STP.
2. Fix the bug that the fiber port status display link down, even if it links on.
3. Fix the bug that received IGMP queries will exhaust our hardware table.
4. Fix the bug that memory leak problem under log-in attack.
5. Fix the bug that IGMP queries packets come from trunk ports will send back to trunk active port.
6. Fix the bug that device can't get correct "port status detail" of member when using cluster manager from WEB.
7. Classifier precedence will not follow longest prefix match.

Known Issues:

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3. The packets which destination address is marked in the filter setting will always send to port 1.
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Upgrade ES-3124F FW:

```
C:\> ftp <ES-3124F IP address>
User : admin
Password: 1234
230 Logged in
ftp> put 380AIV1C0.bin ras
```

```
ftp> bye
```

Where

- User name : the management user name, admin by default
- Password : the management password, 1234 by default
- 380AIV1C0.bin : the name of firmware file you want to upgrade
- ras : the internal firmware name in ES-3124F

Configuration Upgrade:

The ES-3124F uses FTP to upgrade configuration in run-time through its built-in FTP server. You can use any FTP client (for example, [ftp.exe](#) in Windows) to upgrade ES-3124F. The upgrade procedure is as follows:

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